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JOSEPH M. SAUER JONES DAY REAVIS & POGUE NORTH POINT, 901 LAKESIDE AVENUE CLEVELAND, OH 44114				DARNO, PATRICK A
ART UNIT		PAPER NUMBER		
		2163		

DATE MAILED: 08/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/643,029	SMITH, CHRISTOPHER D.
	Examiner	Art Unit
	Patrick A. Darno	2163

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 26 May 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-53 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 18 August 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All
 - b) Some *
 - c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____. | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .
5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
6) <input type="checkbox"/> Other: _____ . |
|---|--|

DETAILED ACTION

1. No claims have been added. Claims 1, 20-42, and 48-53 have been amended. Claims 2-29 and 43-47 were previously presented. Therefore, Claims 1-53 are pending in this office action.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1 and 20 are rejected under 35 U.S.C. 101 because the claims are directed to non-statutory subject matter.

Claim 1 is rejected because the applicant claims a data structure that is not embodied in a computer-readable media. Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention, which permit the data structure's functionality to be realized. However, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory. Appropriate correction is required.

Claims 1 and 20 are rejected because they claim a data structure that does not correspond with the IEEE definition for a data structure. The IEEE definition for a data structure is “a physical or logical relationship among data elements, designed to support specific data manipulation functions.” There is clearly no relationship among data elements specific to a data manipulation function in applicant’s claimed “data structure.” In order to overcome this rejection, the applicant must show a functional relationship between the data elements in the claimed “data structure” resulting in data manipulation. Furthermore, the final outcome or result of the data manipulation should be useful, concrete, and tangible. Appropriate correction is required.

Claims 2-19 are rejected because they inherit or contain the deficiencies of claim 1.

Claims 21-53 are rejected because they inherit or contain the deficiencies of claim 20.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-14, 16-34 and 36-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication Number 2003/0065738 issued to Victor Shiang Yang et al. (hereinafter “Yang”) in further view of U.S. Patent Application Publication Number 2004/0087300 issued to John Ervin Lewis (hereinafter “Lewis”).

Claim 1:

Yang discloses a system for triggering a provisioning event in a service provider using a provisioning request message generated by an external system, comprising:

a provisioning system (Yang: Fig. 1a or Fig. 1b) operable to receive the provisioning request message (Yang: paragraph [0051], lines 1-8; The trigger message is the provisioning request message. Later in the reference the trigger message is called an SMS (short messaging service) message. The data structure for this message can be seen in Fig. 4a.) from the external system (Yang: paragraph [0047], lines 1-8; Note the user may issue the provisioning request message or the call center (service provider) may issue the provisioning request message or some other entity (external system) may issue the provisioning request message.) and transmit information in the provisioning request message to the service provider to trigger the provisioning event (Yang: paragraph [0051], lines 1-8);

the provisioning request message having:

a header section (Yang: paragraph [0058], lines 1-2 and Fig. 4a, 40);

a body section (Yang: paragraph [0059], lines 17-19 and Fig. 4a, 46);

Yang does not explicitly disclose a provisioning entity section contained within the body section that includes information identifying an entity to which the provisioning event pertains, wherein the provisioning entity section includes one or more attributes defined by the external system.

However, Lewis discloses a provisioning entity section contained within the body section that includes information identifying an entity to which the provisioning event pertains (Lewis: paragraph [0121], lines 5-9 and paragraph [0127], lines 1-5; The first reference shows that the routing information contains a destination device type. The second reference shows the routing

information is part of the overall provisioning message to be sent. It is clear that the message sent is a provisioning request because it is used to verify the status of a subscription from a subscriber (service provider). This is one example from the applicant's specification of a provisioning event in paragraph [0009]. Note particularly where applicant states provisioning events include "status information associated with a service." Since the message sent in the Lewis reference is a request to perform a provisioning event, the request must be a provisioning request (see paragraph [0012], lines 3-6 of applicant's specification). And the provisioning request message used by Lewis further includes "information identifying an entity to which the provisioning event pertains". This information in the Lewis reference is the 'Destination Device Type'. This routing information that is part of the provisioning request message makes is the provisioning entity section.), wherein the provisioning entity section includes one or more attributes defined by the external system (Lewis: paragraph [0174], lines 3-8; This is a listing of further attributes describing the destination device and stored at an external system. These can be queried and included in the provisioning request message as part of a provisioning entity section.).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Yang with the teachings of Lewis noted above for the purpose of including a destination device type ("information identifying an entity") inside a provisioning request (Lewis: paragraph [0121], lines 5-9 and paragraph [0127], lines 1-5; First note that the routing information contains a device type. Then note that the routing information is part of the overall provisioning message to be sent.). The skilled artisan would have been motivated to improve the invention of Yang per the above such that the destination device type would aid in the delivery process of the provisioning request (Lewis: paragraph [0150], lines 5-8; The ARC receive the provisioning request from the subscriber (provisioning system)

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and then direct the provisioning request to the appropriate device type. So one of ordinary skill in the art can clearly see that the device type can play an important role in the delivery of a provisioning request.).

Claim 2:

The combination of Yang and Lewis discloses all the elements of claim 1, as noted above, and Lewis further discloses wherein the one or more attributes of the provisioning entity section include a name attribute that identifies the entity (Lewis: paragraph [0121], lines 5-9; The destination device type is the name attribute that identifies the entity. See rejection of claim 1 for further explanation of this reference.).

Claim 3:

The combination of Yang and Lewis discloses all the elements of claim 1, as noted above, and Lewis further discloses wherein the one or more attributes of the provisioning entity section include a type attribute that identifies an entity type of the entity (Lewis: paragraph [0121], lines 5-9).

Claim 4:

The combination of Yang and Lewis discloses all the elements of claim 3, as noted above. Yang does not explicitly disclose wherein the type attribute identifies a model number of the entity. However, Lewis further discloses wherein the type attribute identifies a model number of the entity (Lewis: paragraph [0361], lines 1-4; The mobile identification number is the model number.).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the previously mentioned combination with the further teachings of Lewis noted above. The skilled artisan would have been motivated

to further improve the previously mentioned combination per the above such that user and device information stored in a database can be used for routing messages, validation of services, and for enabling other data services (Lewis: paragraph [0319]; This shows that the information stored in the MIND database can also be used in the provisioning requests disclosed by Lewis. Note that it specifically states that data stored in the MIND database (subscriber information) can be used for “routing messages” (or provisioning requests). And as cited in the rejection of claim 1, the routing information is part of the provisioning request.).

Claim 5:

The combination of Yang and Lewis discloses all the elements of claim 1, as noted above, and Yang further discloses wherein the service provider is a mobile data service provider (Yang: paragraph [0041], lines 2-5 and 12-15).

Claim 6:

The combination of Yang and Lewis discloses all the elements of claim 1, as noted above, and Lewis further discloses wherein the provisioning request message further includes a provisioning data item section contained within the provisioning entity section that identifies a particular entity to which the provisioning event pertains (Lewis: paragraph [0121], lines 5-9 and paragraph [0127], lines 1-5; See rejection of claim 1 for a detailed explanation of this reference.).

Claim 7:

The combination of Yang and Lewis discloses all the elements of claim 6, as noted above, and Yang further discloses wherein the particular entity is a mobile communication device (Yang: paragraph [0006], lines 1-3 and paragraph [0042], lines 4-8).

Claim 8:

The combination of Yang and Lewis discloses all the elements of claim 6, as noted above, and Lewis further discloses wherein the provisioning data item section includes one or more attributes defined by the external system (Lewis: paragraph [0319] and paragraphs [0035] and [0038]; The first reference shows that the information stored in the MIND database can also be used in the provisioning requests disclosed by Lewis. Note that it specifically states that data stored in the MIND database (subscriber information) can be used for “routing messages” (or provisioning requests). And as cited in the rejection of claim 1, the routing information is part of the provisioning request. The second reference gives attributes defined by the external system and stored in the MIND database. These attributes from the MIND database can be included in the routing message and when the routing information is combined with the provisioning request message, as described above, the section of the message containing the attributes of the destination device is the provisioning data section.).

Claim 9:

The combination of Yang and Lewis discloses all the elements of claim 8, as noted above, and Lewis further discloses wherein the one or more attributes of the provisioning data item section include a name attribute that identifies a type of information included within the provisioning data item section (Lewis: paragraph [0385] and [0388]; Note that all the name attributes listed by the applicant in paragraph [0024] are also listed in the cited paragraphs from Lewis. And again, the attributes listed in the cited paragraphs from Lewis can be included in the routing information (Lewis: paragraph [0319]), and the routing information is then added to the provisioning request message. Further note that the reason Lewis incorporates these attributes so that a message can specify requests to provision entities (destination devices) on a plurality of diverse

systems using different schemas (Applicant's specification paragraph [0024] and Lewis: paragraph [0093], lines 5-10.).)

Claim 10:

The combination of Yang and Lewis discloses all the elements of claim 9, as noted above, and Lewis further discloses wherein the type of information included within the provisioning data item section includes a personal identification number (PIN) for the entity (Lewis: paragraph [0388], lines 15-17).

Claim 11:

The combination of Yang and Lewis discloses all the elements of claim 9, as noted above, and Lewis further discloses wherein the type of information included within the provisioning data item section includes a product identifier for the entity (Lewis: paragraph [0361] and paragraph [0319], lines 7-8; The device identifier is the product identifier.).

Claim 12:

The combination of Yang and Lewis discloses all the elements of claim 9, as noted above, and Lewis further discloses wherein the type of information included within the provisioning data item section includes a billing identifier for the entity (Lewis: paragraph [0350], line 10 and paragraph [0319]).

Claim 13:

The combination of Yang and Lewis discloses all the elements of claim 9, as noted above, and Lewis further discloses wherein the type of information included within the provisioning data item section includes an international mobile subscriber identity identifier (IMSI) for the entity (Lewis: paragraph [0388], lines 1-6 and paragraph [0319]).

Claim 14:

The combination of Yang and Lewis discloses all the elements of claim 9, as noted above, and Lewis further discloses wherein the type of information included within the provisioning data item section includes a mobile subscriber integrated services digital network number (MSISDN) for the entity (Lewis: paragraph [0388], lines 1-6 and paragraph [0319]).

Claim 16:

The combination of Yang and Lewis discloses all the elements of claim 1, as noted above, and Lewis further discloses wherein the provisioning entity section contains one or more additional provisioning entity sections that include information identifying one or more additional entities to which the provisioning event pertains, and wherein the one or more additional provisioning entity sections each include one or more attributes defined by the external system (Lewis: paragraphs [0172] and [0173]; These references disclose sending provisioning requests to multiple or additional users. The multiple users are taken from a distribution list and all the users receive the same messages. Further additional users can be added to any list. Further for each additional user device type, destination address, and all other attributes are included in the message (this is equivalent to the provisioning entity and provisioning data item sections).).

It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the previously mentioned combination with the further teachings of Lewis noted above. The skilled artisan would have been motivated to further improve the previously mentioned combination per the above such that a single

message would contain routing information for multiple devices (Lewis: paragraph [0121], lines 1-5).

Claim 17:

The combination of Yang and Lewis discloses all the elements of claim 16, as noted above, and Lewis further discloses wherein a data structure relationship between the provisioning entity section and the one or more additional provisioning entity sections is defined by the external system (Lewis: paragraphs [0172]-[0173]; The distribution list on the external system creates the data structure relationship between the additional entities.).

Claim 18:

The combination of Yang and Lewis discloses all the elements of claim 16, as noted above, and Lewis further discloses wherein the one or more additional provisioning entity sections each contain a provisioning data item section (Lewis: paragraphs [0172]-[0174] and paragraph [0168] and paragraph; These references show that each provisioning request includes a destination device type and destination device address. This makes up the provisioning entity and provisioning data item sections respectively. And each distribution list causes a provisioning request message containing each of the previously mentioned sections to everyone on the list. Therefore each additional provisioning entity contains a provisioning data item.).

Claim 19:

The combination of Yang and Lewis discloses all the elements of claim 18, as noted above, and Lewis further discloses wherein the provisioning data item sections contained within the additional provisioning entity sections each include one or more attributes defined by the external system (Lewis: paragraph [0319] and paragraphs [0035] and [0038]; The first reference shows that the information stored in the MIND database can also be used in

the provisioning requests disclosed by Lewis. Note that it specifically states that data stored in the MIND database (subscriber information) can be used for “routing messages” (or provisioning requests). And as cited in the rejection of claim 1, the routing information is part of the provisioning request. The second reference gives attributes defined by the external system and stored in the MIND database. These attributes from the MIND database can be included in the routing message and when the routing information is combined with the provisioning request message, as described above, the section of the message containing the attributes of the destination device is the provisioning data section.).

Claim 20:

Yang discloses a computer readable medium for storing data for access by an application program being executed on a data processing system comprising: a provisioning data structure stored in the computer readable medium (Yang: paragraph [0100], lines 2-7 and Fig. 10, 1100; This reference and figure clearly show retrieving ‘messages’ (provisioning data structure) from storage so there must clearly be ‘messages’ stored in a computer readable medium.), the provisioning data structure including information resident in a database used by the application program including:

the header section (Yang: paragraph [0058], lines 1-2 and Fig. 4a, 40);

the body section (Yang: paragraph [0059], lines 17-19 and Fig. 4a, 46);

wherein the provisioning data structure stored in the computer readable medium (Yang: paragraph [0100], lines 2-7 and Fig. 10, 1100; This reference and figure clearly show retrieving ‘messages’ (provisioning data structure) from storage so there must clearly be ‘messages’ stored in a computer readable medium.) is for use in a system for triggering a provisioning event in a service provider (Yang: paragraph [0051], lines 1-8), the system including an external system that generates a provisioning request message (Yang: paragraph [0047], lines 1-8; Note the

user may issue the provisioning request message or the call center (service provider) may issue the provisioning request message or some other entity (external system) may issue the provisioning request message.) and a provisioning system that receives the provisioning request message to the service provider to trigger the provisioning event (Yang: Fig. 1a or Fig. 1b and paragraph [0051], lines 1-8; The trigger message is the provisioning request message. Later in the reference the trigger message is called an SMS (short messaging service) message. The data structure for this message can be seen in Fig. 4a.).

Yang does not explicitly disclose the provisioning entity section contained within the body section and including information identifying an entity to which the provisioning event pertains, wherein the provisioning entity section includes one or more attributes defined by the external system.

However, Lewis discloses a provisioning entity section contained within the body section that includes information identifying an entity to which the provisioning event pertains (Lewis: paragraph [0121], lines 5-9 and paragraph [0127], lines 1-5; The first reference shows that the routing information contains a destination device type. The second reference shows the routing information is part of the overall provisioning message to be sent. It is clear that the message sent is a provisioning request because it is used to verify the status of a subscription from a subscriber (service provider). This is one example from the applicant's specification of a provisioning event in paragraph [0009]. Note particularly where applicant states provisioning events include "status information associated with a service." Since the message sent in the Lewis reference is a request to perform a provisioning event, the request must be a provisioning request (see paragraph [0012], lines 3-6 of applicant's specification). And the provisioning request message used by Lewis further includes "information identifying an entity to which the provisioning event pertains". This information in the

Lewis reference is the ‘Destination Device Type’. This routing information that is part of the provisioning request message makes is the provisioning entity section.), wherein the provisioning entity section includes one or more attributes defined by the external system (Lewis: paragraph [0174], lines 3-8; This is a listing of further attributes describing the destination device and stored at an external system. These can be queried and included in the provisioning request message as part of a provisioning entity section.).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Yang with the teachings of Lewis noted above for the purpose of including a destination device type (“information identifying an entity”) inside a provisioning request (Lewis: paragraph [0121], lines 5-9 and paragraph [0127], lines 1-5; First note that the routing information contains a device type. Then note that the routing information is part of the overall provisioning message to be sent.). The skilled artisan would have been motivated to improve the invention of Yang per the above such that the destination device type would aid in the delivery process of the provisioning request (Lewis: paragraph [0150], lines 5-8; The ARC receive the provisioning request from the subscriber (provisioning system) and then direct the provisioning request to the appropriate device type. So one of ordinary skill in the art can clearly see that the device type can play an important role in the delivery of a provisioning request.).

Claim 21:

The combination of Yang and Lewis discloses all the elements of claim 20, as noted above, and Yang further discloses wherein the provisioning request message includes the provisioning data structure (Yang: paragraph [0057], lines 1-4 and Fig. 4a.).

Claim 22:

Claim 22 is rejected under the same reasons set forth in the rejection of claim 2.

Claim 23:

Claim 23 is rejected under the same reasons set forth in the rejection of claim 3.

Claim 24:

Claim 24 is rejected under the same reasons set forth in the rejection of claim 4.

Claim 25:

Claim 25 is rejected under the same reasons set forth in the rejection of claim 5.

Claim 26:

Claim 26 is rejected under the same reasons set forth in the rejection of claim 6.

Claim 27:

Claim 27 is rejected under the same reasons set forth in the rejection of claim 7.

Claim 28:

Claim 28 is rejected under the same reasons set forth in the rejection of claim 8.

Claim 29:

Claim 29 is rejected under the same reasons set forth in the rejection of claim 9.

Claim 30:

Claim 30 is rejected under the same reasons set forth in the rejection of claim 10.

Claim 31:

Claim 31 is rejected under the same reasons set forth in the rejection of claim 11.

Claim 32:

Claim 32 is rejected under the same reasons set forth in the rejection of claim 12.

Claim 33:

Claim 33 is rejected under the same reasons set forth in the rejection of claim 13.

Claim 34:

Claim 34 is rejected under the same reasons set forth in the rejection of claim 14.

Claim 36:

Claim 36 is rejected under the same reasons set forth in the rejection of claim 16

Claim 37:

Claim 37 is rejected under the same reasons set forth in the rejection of claim 17.

Claim 38:

Claim 38 is rejected under the same reasons set forth in the rejection of claim 18.

Claim 39:

Claim 39 is rejected under the same reasons set forth in the rejection of claim 19.

Claim 40:

The combination of Yang and Lewis discloses all the elements of claim 20, as noted above, and Lewis further discloses wherein the computer readable medium includes a transaction identification attribute that identifies a transaction, wherein the transaction includes a provisioning request message, the provisioning event and a provisioning response message (Lewis: paragraph [0137]).

Claim 41:

The combination of Yang and Lewis discloses all the elements of claim 20, as noted above, and Lewis further discloses wherein the computer readable medium includes a transaction type attribute that defines a transaction type of the provisioning event (Lewis: paragraph [0137]).

Claim 42:

The combination of Yang and Lewis disclose all the elements of claim 20, as noted above, and Lewis further discloses wherein the computer readable medium includes a product type attribute that identifies the service provider (Lewis: paragraph [0138]; The service provider address is the originating device address. This address identifies the originator or service provider.).

Claim 43:

The combination of Yang and Lewis discloses all the elements of claim 20, as noted above, and Yang further discloses wherein the header section includes information relating to a sender of the provisioning data structure (Yang: Fig. 4a, 20 and paragraph [0059], lines 1-2).

Claim 44:

The combination of Yang and Lewis discloses all the elements of claim 43, as noted above, and Yang further discloses wherein the header section includes a sender section that includes the information relating to the sender of the provisioning data structure (Yang: Fig. 4a, 20 and paragraph [0059], lines 1-2).

Claim 45:

The combination of Yang and Lewis discloses all the elements of claim 44, as noted above, wherein the sender section includes an identification attribute that includes an identifier for the sender of the provisioning data structure and a name attribute that includes a name for the sender of the provisioning data structure (Yang: Fig. 4a, 20 and paragraph [0059], lines 1-2; Note that this section of the data structure contains either the sender's (originator's) address or a sender's number. The sender's number is equivalent to a name because it is used to identify the sender. That is exactly the same purpose as a sender name.).

Claim 46:

The combination of Yang and Lewis discloses all the elements of claim 43, as noted above, and Yang further includes wherein the header section includes a time stamp section that identifies a time at which the provisioning data structure is generated (Yang: Fig. 4a, 41 and paragraph [0058], lines 12-14).

Claim 47:

The combination of Yang and Lewis discloses all the elements of claim 20, as noted above, and Lewis further discloses wherein the provisioning data structure is created using an extensible markup language (Lewis: paragraphs [0111], lines 3-8 and paragraph [0127], lines 1-5).

It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the previously mentioned combination with the further teachings of Lewis noted above. The skilled artisan would have been motivated to further improve the previously mentioned combination such that a common format such as XML could be used to facilitate the sending and receipt of messages using different messaging protocols and formats, across a range of messaging centers and gateways (Lewis: paragraph [0093], lines 7-10 and paragraphs [0111], lines 3-8 and paragraph [0127], lines 1-5).

Claim 48:

The combination of Yang and Lewis discloses all the elements of claim 20, as noted above, and Lewis further discloses wherein the provisioning system transmits a provisioning reply message to the external system in response to the provisioning request message, and wherein the provisioning reply message includes the provisioning

data structure (Lewis: see at least paragraphs [0141], [0142], [0143], and [0144]; See specifically the routing reply. The cited paragraphs here show determining, based on a routing reply if the subscriber has sufficient funds in a prepaid account. See further paragraphs after [0144] for further examples of messages contained in the routing reply.).

It would have been obvious to one ordinary skill in the art at the time the invention was made to modify the previously mentioned combination with the further teachings of Lewis noted above. The skilled artisan would have been motivated to improve the previously mentioned combination per the above such that the status of a subscriber's account could be verified (Lewis: paragraph [0144]).

Claim 49:

The combination of Yang and Lewis discloses all the elements of claim 48, as noted above, and Lewis further discloses wherein the header section includes a login section and a password section for authenticating the provisioning system (Lewis: paragraph [0121], lines 9-11).

Claim 50:

The combination of Yang and Lewis discloses all the elements of claim 48, as noted above, and Lewis further discloses wherein the header section includes a transaction code list section that includes error information relating to the provisioning request (Lewis: paragraphs [0141]-[0146] describe various kinds of errors (invalid messages) that are returned as part of the provisioning reply to the provisioning request message.).

Claim 51:

The combination of Yang and Lewis discloses all the elements of claim 48, as noted above, and Lewis further discloses wherein the header section includes a transaction code list section includes status information relating to the provisioning request (Lewis: : paragraphs [0141]-[0146]; Specifically paragraph [0144] describes the provisioning reply to the provisioning request message as containing the status of the subscriber's account (i.e., whether or not there enough prepaid funds for the request).).

Claim 52:

The combination of Yang and Lewis discloses all the elements of claim 50, as noted above, and Lewis further discloses wherein the transaction code list section includes a major code attribute that identifies a most severe error from the error information (Lewis: paragraphs [0141]-[0146]; The provisioning reply as disclosed by Lewis allows for the sending of error (invalid) messages as a result of problems in the provisioning process. Designating one error as more severe than another error is simply a design choice.).

Claim 53:

The combination of Yang and Lewis discloses all the elements of claim 50, as noted above, and Lewis further discloses wherein the transaction code list section includes a description attribute that describes the error information (Lewis: paragraphs [0141]-[0146]; See rejection for claims 48, 50, and 52 above for further explanation of this reference.).

4. Claims 15 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang in further view of Lewis and further in view of U.S. Patent Application Publication Number 2004/0058652 issued to Christopher M. McGregor et al. (hereinafter "McGregor").

Claim 15:

The combination of Yang and Lewis discloses all the elements of claim 9, as noted above, but does not explicitly disclose wherein the type of information included within the provisioning data item section includes an integrated circuit card identifier (ICCID) for the entity. However, McGregor discloses wherein the provisioning data item section includes an integrated circuit card identifier (ICCID) for the entity (McGregor: paragraph [0201]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the previously mentioned combination with the teachings of McGregor noted above. The skilled artisan would have been motivated to improve the teachings of the previously mentioned combination per the above such that the ICCID could be used to identify a particular mobile device (McGregor: paragraph [0201], at least lines 3-7).

Claim 35:

Claim 35 is rejected under the same reasons set forth in the rejection of claim 15.

Response to Arguments

Applicant Argues:

The Applicant respectfully disagrees with the rejection under 35 U.S.C. 101. However, to expedite prosecution the Applicant is amending claim 1 to remove the reference to a data structure. Therefore, claim 1 is allowable under 35 U.S.C. 101.

Examiner Responds:

Even though the Applicant has removed the words data structure from claim 1, the claim will remain rejected under 35 U.S.C. 101. This is because claim 1 is still directed towards a

provisioning data structure that does not meet the IEEE definition of a data structure. Claim 1 clearly recites a provisioning request message having a header section, body section, and a provisioning entity section. The only thing in the Applicant's specification that fits this description is a data structure used to send provisioning requests (Applicant's Specification: at least paragraph [0003] and Abstract). Since it is still clear that claim 1 is attempting to include a data structure that does not satisfy the IEEE definition of a data structure, the claim (claim 1), and all its dependent claims, remain rejected under 35 U.S.C. 101.

Claim 20 and all of its dependent claims are also rejected under 35 U.S.C 101 for also claiming a 'data structure' that does not satisfy the IEEE definition of a database.

Applicant Argues:

Yang does not disclose a provisioning system.

Examiner Responds:

Examiner is not persuaded. Yang does indeed disclose a provisioning system. See Fig. 1a and 1b of the Yang reference.

Applicant Argues:

Yang discloses a trigger system message being sent directly to a mobile device that instructs the mobile device "to download [a] requested application program from a file storage location." (Yang, paragraph 51, lines 5-7). The service providing the application program communicates directly to the device, and not to a provisioning system that receives the request from an external system, and transmits the information to the mobile data service provider.

Examiner Responds:

Examiner is not persuaded. The trigger message is the 'provisioning request message'. The service providing can communicate directly with the device. However, the system disclosed by Yang provides alternatives for this. For instance, Yang presents a provisioning system (Yang:

Fig. 1a and 1b) that allows requests to be received from an external system (Yang: paragraph [0047], lines 1-8; Note that the user, call center (service provider), or other entity (external system) can issue the ‘provisioning’ request.), and then transmits the information to a wireless device (Yang: Fig. 1a and 1b).

Since it is clear that Yang discloses all the elements argued by the applicant above, the Examiner has decided to maintain the original rejections given under 35 U.S.C. 103(a).

Applicant Argues:

Lewis does not disclose an external system and does not disclose a provisioning request message including one or more attributes defined by the external system. Lewis is directed to a system for facilitating messaging between customers using different mobile communication devices. Because Lewis does not disclose an external system, the messages sent cannot be provisioning requests sent to a provisioning system from an external system, and do not contain provisioning entity sections including attributes defined by the external system.

Examiner Responds:

Examiner is not persuaded. The messages sent by the Lewis reference may not be provisioning requests or events, but one fact is certain, the messages sent by Lewis and the messages sent in the Applicant’s specification are both indeed the same type of message. This is because the message disclosed by Lewis and the message disclosed by the Applicant both verify the status of a users subscription or service (Applicant’s Specification: paragraph [0009] and at least Lewis: paragraph [0319]). So one fact is clear, either the Applicant’s Specification and the Lewis reference both disclose provisioning messages or events, or neither the Applicant’s Specification nor the Lewis reference disclose provisioning messages or requests.

Since the Applicant describes a provisioning request or event as something that can be used to verify the status of a subscription or service (Applicant’s Specification: paragraph

[0009]), the Examiner assumes that the Applicant's Specification and the Lewis reference both indeed disclose a provisioning request or message.

In light of the explanations and the above office action, the Examiner is confident that the combination of Yang and Lewis discloses all the elements of the Applicant's claimed invention in such a manner that renders the Applicant's invention unobvious and therefore unpatentable. The rejection given under 35 U.S.C. 103(a) is upheld by the Examiner.

Applicant Argues:

Claim 20 is amended to claim a computer readable medium that stores a provisioning data structure, as opposed to the previously claimed provisioning data structure. Further, the claim is amended to show a relationship among data elements specific to a data manipulation function. Therefore, claim 20 is patentable under 35 U.S.C. 101.

Examiner Responds:

Examiner is not persuaded. The heart of Applicant's claim 20 is still directed to a data structure that has no "physical or logical relationship between the data elements". The so-called 'data structure' claimed by the Applicant represents a mere listing of data. A mere listing of data does not meet the IEEE definition of a data structure. Since the 'data structure' presented by the Applicant does not meet the IEEE definition of a data structure, the claim is in fact rejected under 35 U.S.C. 101 for claiming non-statutory subject matter. The rejection under 35 U.S.C. 101 is upheld.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick A. Darno whose telephone number is (571) 272-0788. The examiner can normally be reached on Monday - Friday, 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Patrick A. Darno
Examiner
Art Unit 2163

PD

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